

Admitted:  
California  
District of Columbia  
New York  
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of  
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FILE

JUN 19 1992

Federal Communications Commission  
Office of the Secretary

June 18, 1992

FEDERAL EXPRESS/BY HAND

Donna Searcy, Secretary  
Federal Communications Commission  
1919 M Street NW Room 222  
Washington, D.C. 20554

Re: Healdsburg, CA MM Docket No. 92-111

Dear Ms. Searcy:

Enclosed for filing in the above-captioned proceeding are an original and six copies of Healdsburg Broadcasting, Inc.'s (a) Petition For Leave to Amend and Amendment and (b) Petition to Enlarge Issues.

Should you have any questions concerning Healdsburg Broadcasting, Inc., please contact the undersigned.

Very truly yours,

  
Peter A. Casciato

enclosures

cc: Michael & Julia Akana  
w/encls.

PAC:sc

No. of Copies rec'd  
List A B C D E

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BEFORE THE FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, DC

In re Applications of )  
Deas Communications, Inc., )  
et al. )  
For A Construction Permit )  
For A New FM Station on )  
Channel 240A )  
Healdsburg, California )

MM Docket No. 92-111  
File Nos. BPH-910208MB  
et al.

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JUN 19 1992

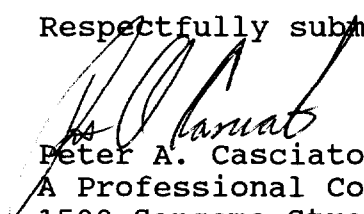
To: Hon. Edward J. Kuhlmann,  
Administrative Law

Federal Communications Commission  
Office of the Secretary

PETITION FOR LEAVE TO AMEND

Healdsburg Broadcasting, Inc. ("HBI"), applicant for a new FM radio station on channel 240A in Healdsburg, California, by its attorney, hereby petitions for leave to amend its application pursuant to Ordering Paragraphs 20 and 21 of the Hearing Designation Order ("HDO") DA 92-577 released May 20, 1992 and Section 73.3514(b) of the Commission's rules. The attached amendment cures the antenna height and contour overlap matters noted in the HDO and also provides the requested environmental assessment noted therein. As a result, HBI requests that it be granted leave to file the attached engineering information.

Respectfully submitted,

  
Peter A. Casciato  
A Professional Corporation  
1500 Sansome Street Suite 201  
San Francisco, CA 94111  
(415) 291-8661


June 18, 1992

Counsel to Healdsburg  
Broadcasting, Inc.

Healdsburg Broadcasting, Inc. Application  
Amendment No. 7  
Application No. BPH-910211MB  
FM Radio Station on Channel 240A  
Healdsburg, CA

Healdsburg Broadcasting, Inc. hereby amends its application to include the attached engineering information required by the Hearing Designation Order in MM Docket No. 92-111.

Date: June 18, 1992

  
Julia Akana, Secretary

CERTIFICATE OF SERVICE

I, Peter A. Casciato, certify that the following is true and correct:

I am employed in the City and County of San Francisco, California, am over the age of eighteen years, and am not a party to the within entitled action:

My business address is: 1500 Sansome St., Suite 201, San Francisco, California 94111.

On June 18, 1992, I served the attached of Petition For Leave to Amend and Amendment of Healdsburg Broadcasting, Inc. by causing true copies thereof, enclosed in sealed envelopes with postage thereon fully prepaid, to be placed in the United States Post Office mail box at San Francisco, California, addressed to the following listed people:

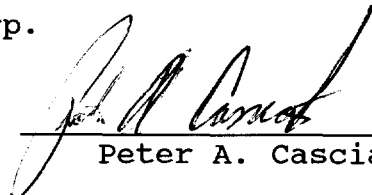
Hon. Edward J Kuhlmann  
Administrative Law Judge  
Federal Communications Commission  
2000 L Street, NW Room 220  
Washington, DC 20036  
(Federal Express\By Hand)

Larry Miller, Esq.  
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Chief, Data Management Staff  
Audio Services Division  
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New York, NY 10022-2585  
Attorney for Empire Broadcasting Corp.

  
Peter A. Casciato

Amendment Engineering Statement

This statement responds to Docket No. 92-111, Hearing Designation Order, paragraph 20, directing Healdsburg Broadcasting, Inc. (HBI) to submit a minor curative amendment to correct antenna height and contour overlap deficiencies, and paragraph 21 requiring an environmental assessment addressing the issue of RF exposure to workers on HBI's proposed tower.

The attached engineering corrects pages 17 and 18 from section V-B, and provides corrected exhibits and maps for the continued use of a directional antenna, utilizing 509 meters Above Mean Sea Level. The actual antenna location and maximum ERP of 480 watts remain unchanged from the original engineering. Likewise, the antenna type, manufacture and location of HBI's transmitter site remain unchanged. The correction enlarges all pertinent contours; area within the proposed 70 dBu contour increases from 1158 to 2000 square Kilometers, and the enclosed population from 84,399 to 90,301 persons (1980 census). Modification of the original directional antenna was required to limit radiation towards KKHI-FM to protect it for a short-spaced requirement of 8 kilometers in accordance with Sections 73.207 and 73.215 of the Commission's rules. Distances to KKHI-FM's protected and interfering contours are based on the Class B maximum of 50 KW at 150 meters HAAT. Further, HBI does not propose to side mount its antenna on the same structure as KMGG (BPH910030IF). KMGG is located on a wooden pole approximately 31 meters away.

### Environmental Assessment

The Mt. Jackson communications facility is located on a remote rugged mountain top. No deleterious ecological or environmental effects delineated in Section 1.1307 of the Commission's Rules are evident or will result from the addition of HBI's proposed radiator. A theoretical study was conducted to fully assess the radio frequency power density question.

Empire Communications, owner of the Mt. Jackson communications facility, has supplied a list of all site users located on the same tower HBI proposes to use. Additionally, KMGG-FM, as already noted, is located on a separate structure. Figure 2 summarizes a power density hazard calculation study showing the theoretical worst-case maximum power 100% duty cycle contribution from all contributors except HBI. The maximum ERP from each antenna was assumed to be isotropically radiated to ensure an absolute worst-case upper bound. Most of the existing antennas are vertically polarized non-directional low power systems multiplexing several users through RF power combiners. The aggregate result concludes that fields 54.3% of those allowed under ANSI C95.1-1982 would be present at the base of the proposed tower if all users transmitted simultaneously with maximum isotropic ERP. The addition of HBI's 2-bay radiator would contribute an additional 14.3% to this total, assuming it too were isotropically radiating at its maximum ERP of 0.480 KW. Based on a more realistic estimate employing the manufacturer's calculated vertical radiation characteristic, an additional contribution of less than 1% is expected at the tower base. Figure 3 summarizes the proposed 2-bay radiator's expected far-field power densities using this vertical radiation characteristic [see Exhibit-3 pages 3 and 4 for basis].

Figure 2. Calculated worst-case power density contributions referred to base of the proposed common tower.

| Freq.<br>[MHZ.] | Licensee               | ERP<br>[Watts] | Antenna        | Height<br>[m] | Pol.<br>Factor | Erel<br>[V/V] | OST-65<br>Equation | S<br>[uW/cm2] | ANSI Sref<br>[uW/cm2] | ANSI<br>[%] | Notes |
|-----------------|------------------------|----------------|----------------|---------------|----------------|---------------|--------------------|---------------|-----------------------|-------------|-------|
| 43.200          | Cook Paging Inc.       | 90             | Vertical       | 10.7          | 1.0            | 1.0000        | 4                  | 26.4          | 1000                  | 2.64        | 1     |
| 43.440          | Korbel Inc.            | 90             | Vertical       | 5.5           | 1.0            | 1.0000        | 4                  |               | 1000                  |             | 1     |
| 155.550         | Sweetwater Utility     | 25             | Vertical G.P.  | 3.1           | 1.0            | 1.0000        | 4                  | 86.9          | 1000                  | 8.69        | 1     |
| 451.725         | Korbel Inc.            | 140            | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 26.1          | 1506                  | 1.73        | 1     |
| 460.700         | Mark West Schools      | 140            | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 26.1          | 1536                  | 1.70        | 1     |
| 460.825         | Carlile & Assoc.       | 140            | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 26.1          | 1536                  | 1.70        | 1     |
| 463.850         | TeeVax                 | 180            | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 33.5          | 1546                  | 2.17        | 1     |
| 463.950         | Sonoma County Pump     | 120            | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 22.3          | 1546                  | 1.44        | 1     |
| 462.900         | PacWest Paging         | 600            | Vertical       | 23.2          | 1.0            | 1.0000        | 4                  | 37.2          | 1543                  | 2.41        | 1     |
| 462.975         | Sonoma Cnty. Life Sup. | 140            | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 26.1          | 1543                  | 1.69        | 1     |
| 464.500         | Manuel Bros. Const.    | 50             | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 9.3           | 1548                  | 0.60        | 1     |
| 464.200         | Young Am Homes         | 50             | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 9.3           | 1547                  | 0.60        | 1     |
| 464.025         | Victor Residential     | 50             | Vert. combiner | 13.4          | 1.0            | 1.0000        | 4                  | 9.3           | 1547                  | 0.60        | 1     |
| 851.2125        | Sonoma Cnty. Life Sup. | 110            | Vert. combiner | 29.3          | 1.0            | 1.0000        | 4                  | 4.3           | 2837                  | 0.15        | 1     |
| 851.6875        | Empire Communications  | 320            | Vert. combiner | 29.3          | 1.0            | 1.0000        | 4                  | 12.5          | 2839                  | 0.44        | 1     |
| 856.6875        | "                      | 320            | Vert. combiner | 29.3          | 1.0            | 1.0000        | 4                  | 12.5          | 2856                  | 0.44        | 1     |
| 857.6875        | "                      | 320            | Vert. combiner | 29.3          | 1.0            | 1.0000        | 4                  | 12.5          | 2859                  | 0.44        | 1     |
| 858.6875        | "                      | 320            | Vert. combiner | 29.3          | 1.0            | 1.0000        | 4                  | 12.5          | 2862                  | 0.44        | 1     |
| 859.6875        | "                      | 320            | Vert. combiner | 29.3          | 1.0            | 1.0000        | 4                  | 12.5          | 2866                  | 0.44        | 1     |
| 860.6875        | "                      | 320            | Vert. combiner | 29.3          | 1.0            | 1.0000        | 4                  | 12.5          | 2869                  | 0.43        | 1     |
| 929.4125        | Comtech Paging         | 440            | Vertical       | 29.3          | 1.0            | 1.0000        | 4                  | 17.1          | 3098                  | 0.55        | 1     |
| 954.300         | Empire Communications  | 75             | 1.83 m dish    | 11.6          | 1.0            | 1.0000        | 4                  | 18.6          | 3181                  | 0.59        | 1     |
| CH249A          | KMGG-FM, BPH910930IF   | 2040           | 2-Bay CPOL     | 14.2          | 2.0            | 1.0000        | 4                  | 117           | 1000                  | 11.7        | 1,2   |

Notes

1: Worst-case isotropic radiator assumed.

2: Radiator located on wooden pole approximately 31 meters away on a bearing of 310 degrees.

ANSI C95.1-1982: S reference = 1000 [ $\mu\text{W}/\text{cm}^2$ ]

OST Bulletin No. 65 Equation-3 used for calculation of S

Ground Reflection Factor = 1.6 (EPA)

Polarization factor = 2 [V/V] for Cpol with zero ellipticity

ERP = 0.480 [KW]

Height = 14.2 [m]

Antenna Type: Jampro JMPC, 2-bays

| Elevation<br>[deg.] | Erel<br>[V/V] | S<br>[ $\mu\text{W}/\text{cm}^2$ ] | ANSI<br>[%] | Radius<br>[m] |
|---------------------|---------------|------------------------------------|-------------|---------------|
| 0.0                 | 1.000         | -                                  | -           | Horizon       |
| -5.0                | 0.952         | 6.84                               | 0.68        | 162.0         |
| -10.0               | 0.835         | 3.34                               | 0.33        | 80.5          |
| -15.0               | 0.649         | 4.49                               | 0.49        | 53.0          |
| -20.0               | 0.434         | 3.50                               | 0.35        | 39.0          |
| -25.0               | 0.211         | 1.26                               | 0.13        | 30.5          |
| -30.0               | 0.000         | 0.00                               | 0.00        | 24.6          |
| -35.0               | 0.178         | 1.70                               | 0.17        | 20.3          |
| -40.0               | 0.307         | 6.20                               | 0.62        | 16.9          |
| -45.0               | 0.395         | 12.4                               | 1.24        | 14.2          |
| -50.0               | 0.442         | 18.2                               | 1.82        | 11.9          |
| -51.0               | 0.444         | 18.9                               | 1.89        | 11.5          |
| -52.0               | 0.445         | 19.6                               | 1.96        | 11.1          |
| -53.0               | 0.444         | 20.0                               | 2.00        | 10.7          |
| -54.0               | 0.442         | 20.3                               | 2.03        | 10.3          |
| -55.0               | 0.439         | 20.6                               | 2.06        | 9.9           |
| -56.0               | 0.435         | 20.7                               | 2.07        | 9.6           |
| -57.0               | 0.430         | 20.7                               | 2.07        | 9.2           |
| -60.0               | 0.408         | 19.9                               | 1.99        | 8.2           |
| -65.0               | 0.365         | 17.4                               | 1.74        | 6.6           |
| -70.0               | 0.311         | 13.6                               | 1.36        | 5.2           |
| -75.0               | 0.246         | 8.98                               | 0.89        | 3.8           |
| -80.0               | 0.178         | 4.84                               | 0.48        | 2.5           |
| -85.0               | 0.139         | 3.05                               | 0.31        | 1.2           |
| -90.0               | 0.100         | 1.59                               | 0.16        | 0.0           |

Figure 3.  
Predicted far-field power densities for proposed antenna



I conclude from this prima facie study that hazardous fields do not exist anywhere on the ground prior to or after the addition of HBI's proposed 2-bay radiator. Occupational safety will be insured by coordinating with the site user so any authorized tower work will be done with HBI's transmitter turned off. As a warning to the general public, radiation hazard signs will be clearly posted at the base of the proposed tower.

By Stephen C. Petersen  
Stephen C. Petersen, P.E.  
June 11, 1992

# Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY

File No. \_\_\_\_\_

ASB Referral Date \_\_\_\_\_

Referred by \_\_\_\_\_

Name of Applicant

Healdsburg Broadcasting, Incorporated (amendment)

Call letters (if issued)

Is this application being filed in response to a window? ☐ Yes ☒ No

If Yes, specify closing date: \_\_\_\_\_

Purpose of Application: (check appropriate box(es))

☒ Construct a new (main) facility

☐ Construct a new auxiliary facility

☐ Modify existing construction permit for main facility

☐ Modify existing construction permit for auxiliary facility

☐ Modify licensed main facility

☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

☐ Antenna supporting-structure height

☐ Effective radiated power

☐ Antenna height above average terrain

☐ Frequency

☐ Antenna location

☐ Class

☐ Main Studio location

☐ Other (Summarize briefly)

File Number(s) BPH-910211MB

1. Allocation:

| Channel No. | Principal community to be served: |        |       |
|-------------|-----------------------------------|--------|-------|
|             | City                              | County | State |
| 240         | Healdsburg                        | Sonoma | CA    |

Class (check only one box below)

☒ A ☐ B1 ☐ B ☐ C3

☐ C2 ☐ C1 ☐ C

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

Mt. Jackson: 10.2 Km bearing 13.0 deg. True to D90-228 Coordinates

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

|          |     |     |     |           |      |     |     |
|----------|-----|-----|-----|-----------|------|-----|-----|
| Latitude | 38° | 32' | 24" | Longitude | 122° | 57' | 39" |
|----------|-----|-----|-----|-----------|------|-----|-----|

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☐ Yes ☒ No

If Yes, give call letter(s) or file number(s) or both. \_\_\_\_\_

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any. \_\_\_\_\_

15. Attach as an Exhibit a 75 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

|                  |
|------------------|
| Exhibit No.<br>5 |
|------------------|

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

|                  |
|------------------|
| Exhibit No.<br>6 |
|------------------|

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 3.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 259 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 2000 sq. km. Population 90,301

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

|                   |
|-------------------|
| Exhibit No.<br>NA |
|-------------------|

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

☒ Linearly interpolated 30-second database ☐ 75 minute topographic map

(Source: NOAA)

☐ Other *(briefly summarize)*

## SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 5)

| Radial bearing<br>(degrees True) | Height of radiation<br>center above average<br>elevation of radial<br>from 8 to 16 km<br>(meters) | Predicted Distances                     |                                       |
|----------------------------------|---|---|---------------------------------------|
|                                  |   | To the 816 mV/m contour<br>(kilometers) | To the 1 mV/m contour<br>(kilometers) |
| *                                |   |   |                                       |
| 0                                | 271   | 14.1                                    | 25.1                                  |
| 45                               | 397   | 17.1                                    | 30.2                                  |
| 90                               | 438   | 17.2                                    | 30.4                                  |
| 135                              | 444   | 10.6                                    | 19.3                                  |
| 180                              | 343   | 11.3                                    | 20.1                                  |
| 225                              | 388   | 16.9                                    | 29.9                                  |
| 270                              | 345   | 16.0                                    | 28.2                                  |
| 315                              | 83  | 7.8                                     | 13.8                                  |

\*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT.

## 20. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within Section 11807 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 11811.

Exhibit No.  
NA

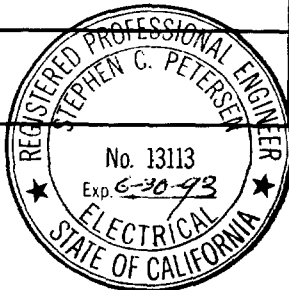
If No, explain briefly why not.

See Engineering Statement, Exhibit-1

## CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

|  |  |
|--|--|
| Name (Typed or Printed)<br>Stephen C. Petersen | Relationship to Applicant (e.g., Consulting Engineer)<br>Consulting Engineer |
| Signature<br><i>Stephen C. Petersen</i>        | Address (Include ZIP Code)<br>9629 Zayante Drive<br>Felton, CA 95018         |
| Date<br>June 11, 1992                          | Telephone No. (Include Area Code)<br>(408) 335 - 3115                        |

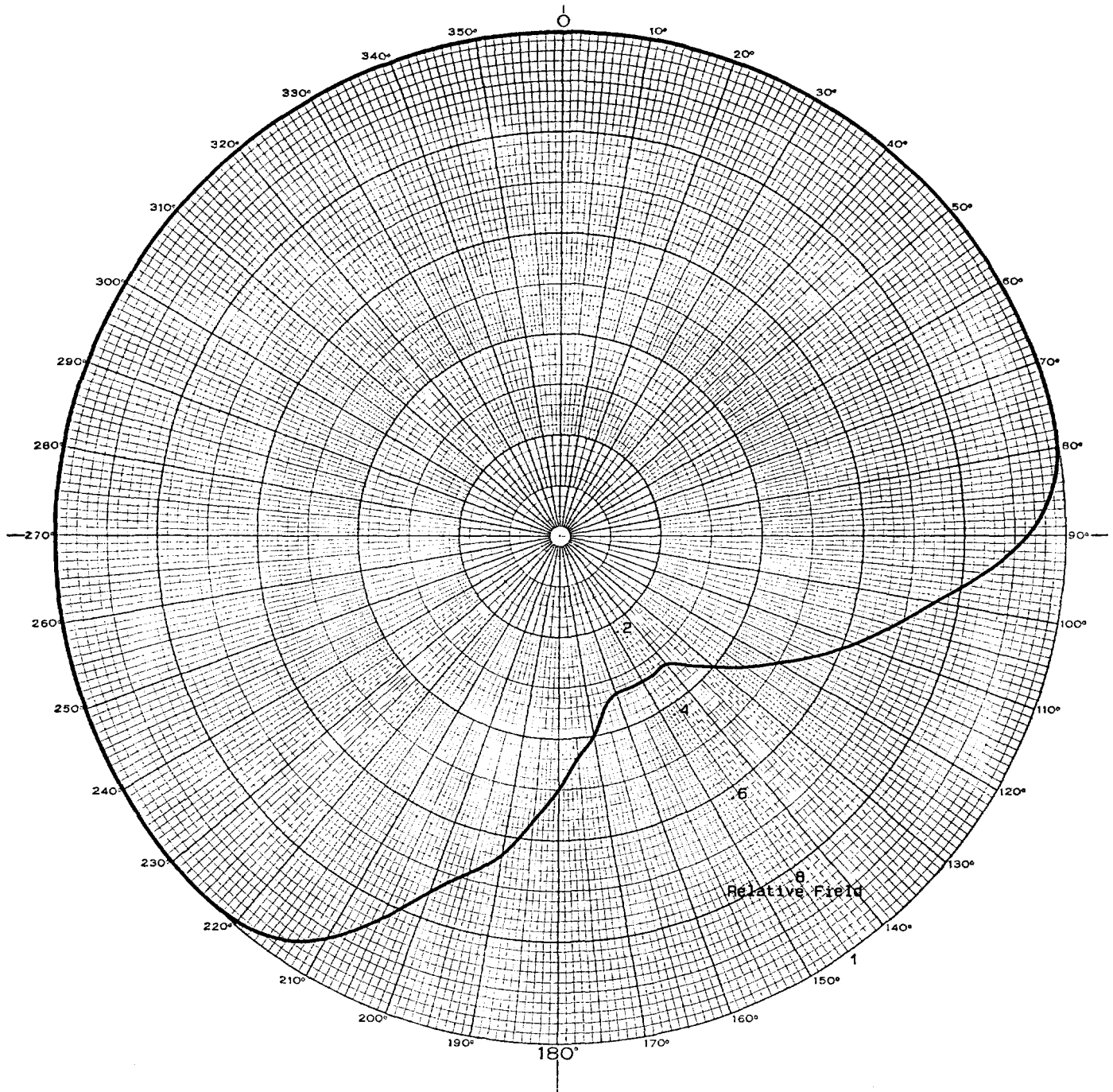


Healdsburg Broadcasting, Inc.  
Proposed Channel 240A, Healdsburg, CA  
FCC Form 301, Section V-B, question 10, Antenna Data

Proposed Directional Antenna  
Horizontal Plane Relative Field Azimuth Pattern

TYPE: Jampro JMPC, 2 Bay DA

POLARIZATION: Circular



Healdsburg Broadcasting, Inc.  
Proposed Channel 240A, Healdsburg, CA  
FCC Form 340, Section V-B, question 10, Antenna Data

Horizontal Plane Relative Field Tabulation For Proposed Directional Antenna

Antenna Type: Jampro JMCP 2 Bay, DA

Beam Tilt = 0.0 degree

Polarization: Circular; maximum horizontal polarization tabulated

| Azim  | E-rel | dB-rel | Azim  | E-rel | dB-rel | Azim  | E-rel | dB-rel |
|-------|-------|--------|-------|-------|--------|-------|-------|--------|
| 0.0   | 1.000 | 0.000  | 5.0   | 1.000 | 0.000  | 10.0  | 1.000 | 0.000  |
| 15.0  | 1.000 | 0.000  | 20.0  | 1.000 | 0.000  | 25.0  | 1.000 | 0.000  |
| 30.0  | 1.000 | 0.000  | 35.0  | 1.000 | 0.000  | 40.0  | 1.000 | 0.000  |
| 45.0  | 1.000 | 0.000  | 50.0  | 1.000 | 0.000  | 55.0  | 1.000 | 0.000  |
| 60.0  | 1.000 | 0.000  | 65.0  | 1.000 | 0.000  | 70.0  | 1.000 | 0.000  |
| 75.0  | 1.000 | 0.000  | 80.0  | 1.000 | 0.000  | 85.0  | 0.970 | -0.265 |
| 90.0  | 0.920 | -0.724 | 95.0  | 0.840 | -1.514 | 100.0 | 0.750 | -2.499 |
| 105.0 | 0.680 | -3.350 | 110.0 | 0.620 | -4.152 | 115.0 | 0.560 | -5.036 |
| 120.0 | 0.500 | -6.021 | 125.0 | 0.450 | -6.936 | 130.0 | 0.400 | -7.959 |
| 135.0 | 0.360 | -8.874 | 140.0 | 0.330 | -9.630 | 145.0 | 0.330 | -9.630 |
| 150.0 | 0.330 | -9.630 | 155.0 | 0.330 | -9.630 | 160.0 | 0.330 | -9.630 |
| 165.0 | 0.350 | -9.119 | 170.0 | 0.400 | -7.959 | 175.0 | 0.440 | -7.131 |
| 180.0 | 0.500 | -6.021 | 185.0 | 0.565 | -4.959 | 190.0 | 0.640 | -3.876 |
| 195.0 | 0.690 | -3.223 | 200.0 | 0.750 | -2.499 | 205.0 | 0.830 | -1.618 |
| 210.0 | 0.920 | -0.724 | 215.0 | 0.970 | -0.265 | 220.0 | 1.000 | 0.000  |
| 225.0 | 1.000 | 0.000  | 230.0 | 1.000 | 0.000  | 235.0 | 1.000 | 0.000  |
| 240.0 | 1.000 | 0.000  | 245.0 | 1.000 | 0.000  | 250.0 | 1.000 | 0.000  |
| 255.0 | 1.000 | 0.000  | 260.0 | 1.000 | 0.000  | 265.0 | 1.000 | 0.000  |
| 270.0 | 1.000 | 0.000  | 275.0 | 1.000 | 0.000  | 280.0 | 1.000 | 0.000  |
| 285.0 | 1.000 | 0.000  | 290.0 | 1.000 | 0.000  | 295.0 | 1.000 | 0.000  |
| 300.0 | 1.000 | 0.000  | 305.0 | 1.000 | 0.000  | 310.0 | 1.000 | 0.000  |
| 315.0 | 1.000 | 0.000  | 320.0 | 1.000 | 0.000  | 325.0 | 1.000 | 0.000  |
| 330.0 | 1.000 | 0.000  | 335.0 | 1.000 | 0.000  | 340.0 | 1.000 | 0.000  |
| 345.0 | 1.000 | 0.000  | 350.0 | 1.000 | 0.000  | 355.0 | 1.000 | 0.000  |

Notes:

1. Tabulation is based on Jampro Corp. supplied data with fields specified every 10.0 degrees, beginning with 0.0 degrees; 45, 135 also specified. Intermediate quantities are interpolated with a cubic spline to produce a smooth curve.

2. Maximum horizontal polarization specified; V-pol less than or equal to H-pol. Final data to be supplied with 302 filing following antenna range measurements.

Healdsburg Broadcasting, Inc.  
Proposed Channel 240A, Healdsburg, CA  
FCC Form 301, Section V-B, question 13, Allocation Study

Calculated Distances to Proposed Service and Interference Contours  
N 38-32-24, W 122-57-39

| Azim<br>(deg) | E-rel<br>(V/V) | Radial ERP<br>(W) | (dBk)   | Radial |         | CONTOUR DISTANCES (Km) |                  |                  |
|---------------|----------------|-------------------|---------|--------|---------|------------------------|------------------|------------------|
|               |                |                   |         | AE(m)  | Haat(m) | F[5050]<br>60dBu       | F[5050]<br>70dBu | F[5010]<br>48dBu |
| 0.0           | 1.000          | 480.0             | -3.188  | 238    | 271     | 25.1                   | 14.1             | 51.9             |
| 15.0          | 1.000          | 480.0             | -3.188  | 162    | 347     | 28.3                   | 16.0             | 58.2             |
| 30.0          | 1.000          | 480.0             | -3.188  | 135    | 374     | 29.4                   | 16.6             | 60.5             |
| 45.0          | 1.000          | 480.0             | -3.188  | 112    | 397     | 30.2                   | 17.1             | 62.3             |
| 60.0          | 1.000          | 480.0             | -3.188  | 123    | 386     | 29.8                   | 16.9             | 61.5             |
| 75.0          | 1.000          | 480.0             | -3.188  | 91     | 418     | 30.9                   | 17.6             | 63.4             |
| 90.0          | 0.920          | 406.3             | -3.912  | 71     | 438     | 30.4                   | 17.2             | 62.1             |
| 105.0         | 0.680          | 222.0             | -6.573  | 67     | 442     | 26.3                   | 14.8             | 55.1             |
| 120.0         | 0.500          | 120.0             | -9.208  | 82     | 427     | 22.3                   | 12.5             | 47.5             |
| 125.0         | 0.450          | 97.2              | -10.123 | 74     | 435     | 21.4                   | 11.9             | 45.4             |
| 130.0         | 0.400          | 76.8              | -11.146 | 71     | 438     | 20.2                   | 11.2             | 43.0             |
| 135.0         | 0.360          | 62.2              | -12.062 | 65     | 444     | 19.3                   | 10.6             | 41.0             |
| 140.0         | 0.330          | 52.3              | -12.817 | 70     | 439     | 18.4                   | 10.0             | 39.1             |
| 145.0         | 0.330          | 52.3              | -12.817 | 76     | 433     | 18.3                   | 10.0             | 38.9             |
| 150.0         | 0.330          | 52.3              | -12.817 | 78     | 431     | 18.2                   | 9.9              | 38.8             |
| 155.0         | 0.330          | 52.3              | -12.817 | 95     | 414     | 17.9                   | 9.8              | 38.3             |
| 160.0         | 0.330          | 52.3              | -12.817 | 111    | 398     | 17.5                   | 9.6              | 37.7             |
| 165.0         | 0.350          | 58.8              | -12.306 | 143    | 366     | 17.4                   | 9.6              | 37.1             |
| 170.0         | 0.400          | 76.8              | -11.146 | 157    | 352     | 18.2                   | 10.2             | 38.7             |
| 175.0         | 0.440          | 92.9              | -10.319 | 160    | 349     | 19.1                   | 10.7             | 40.4             |
| 180.0         | 0.500          | 120.0             | -9.208  | 166    | 343     | 20.1                   | 11.3             | 42.6             |
| 185.0         | 0.565          | 153.2             | -8.147  | 177    | 332     | 21.1                   | 11.8             | 44.3             |
| 190.0         | 0.640          | 196.6             | -7.064  | 188    | 321     | 22.0                   | 12.4             | 46.1             |
| 195.0         | 0.690          | 228.5             | -6.411  | 164    | 345     | 23.6                   | 13.3             | 49.7             |
| 200.0         | 0.750          | 270.0             | -5.686  | 161    | 348     | 24.7                   | 13.9             | 51.8             |
| 210.0         | 0.920          | 406.3             | -3.912  | 137    | 372     | 28.1                   | 15.9             | 58.4             |
| 225.0         | 1.000          | 480.0             | -3.188  | 121    | 388     | 29.9                   | 16.9             | 61.6             |
| 240.0         | 1.000          | 480.0             | -3.188  | 201    | 308     | 26.6                   | 15.1             | 54.9             |
| 255.0         | 1.000          | 480.0             | -3.188  | 243    | 266     | 24.8                   | 14.0             | 51.4             |
| 270.0         | 1.000          | 480.0             | -3.188  | 164    | 345     | 28.2                   | 16.0             | 58.0             |
| 285.0         | 1.000          | 480.0             | -3.188  | 233    | 276     | 25.3                   | 14.2             | 52.3             |
| 300.0         | 1.000          | 480.0             | -3.188  | 287    | 222     | 22.8                   | 12.8             | 47.4             |
| 315.0         | 1.000          | 480.0             | -3.188  | 426    | 83      | 13.8                   | 7.8              | 29.1             |
| 330.0         | 1.000          | 480.0             | -3.188  | 324    | 185     | 21.0                   | 11.7             | 43.2             |
| 345.0         | 1.000          | 480.0             | -3.188  | 258    | 251     | 24.2                   | 13.6             | 50.2             |

Healdsburg Broadcasting, Inc.  
Proposed Channel 240A, Healdsburg, CA  
FCC Form 301, Section V-B, question 13, Allocation Study

Calculated Distances to First Adjacent Channel Station KKHI Contours  
Based on Class-B 50 Kilowatt ERP at 150 meters HAAT  
N 37-41-23, W 122-26-12

| Azim<br>(deg) | E-rel<br>(V/V) | Radial ERP<br>(KW) | Radial ERP<br>(dBk) | Radial             |         | CONTOUR DISTANCES (Km) <sub>1</sub> |                   |
|---------------|----------------|--------------------|---------------------|--------------------|---------|-------------------------------------|-------------------|
|               |                |                    |                     | AE(m) <sub>2</sub> | Haat(m) | 54 dBu<br>F[5050]                   | 54 dBu<br>F[5010] |
| 0.0           | 1.000          | 50.0               | 16.993              | 55                 | 152     | 65.3                                | 78.4              |
| 5.0           | 1.000          | 50.0               | 16.993              | 48                 | 159     | 66.2                                | 79.4              |
| 10.0          | 1.000          | 50.0               | 16.993              | 45                 | 162     | 66.6                                | 79.8              |
| 15.0          | 1.000          | 50.0               | 16.993              | 40                 | 167     | 67.2                                | 80.5              |
| 20.0          | 1.000          | 50.0               | 16.993              | 32                 | 175     | 68.1                                | 81.6              |
| 45.0          | 1.000          | 50.0               | 16.993              | 14                 | 193     | 69.8                                | 83.9              |
| 90.0          | 1.000          | 50.0               | 16.993              | 1                  | 206     | 71.1                                | 85.5              |
| 135.0         | 1.000          | 50.0               | 16.993              | 11                 | 196     | 70.1                                | 84.3              |
| 180.0         | 1.000          | 50.0               | 16.993              | 196                | 11      | 36.1                                | 45.3              |
| 225.0         | 1.000          | 50.0               | 16.993              | 32                 | 175     | 68.1                                | 81.6              |
| 270.0         | 1.000          | 50.0               | 16.993              | 12                 | 195     | 70.0                                | 84.2              |
| 300.0         | 1.000          | 50.0               | 16.993              | 14                 | 193     | 69.8                                | 83.9              |
| 305.0         | 1.000          | 50.0               | 16.993              | 15                 | 192     | 69.7                                | 83.8              |
| 310.0         | 1.000          | 50.0               | 16.993              | 18                 | 189     | 69.4                                | 83.4              |
| 315.0         | 1.000          | 50.0               | 16.993              | 23                 | 184     | 69.0                                | 82.8              |
| 320.0         | 1.000          | 50.0               | 16.993              | 31                 | 176     | 68.2                                | 81.7              |
| 325.0         | 1.000          | 50.0               | 16.993              | 45                 | 162     | 66.6                                | 79.8              |
| 330.0         | 1.000          | 50.0               | 16.993              | 65                 | 142     | 63.9                                | 76.9              |
| 335.0         | 1.000          | 50.0               | 16.993              | 71                 | 136     | 63.1                                | 76.0              |
| 340.0         | 1.000          | 50.0               | 16.993              | 81                 | 126     | 61.5                                | 74.3              |
| 345.0         | 1.000          | 50.0               | 16.993              | 87                 | 120     | 60.6                                | 73.3              |
| 350.0         | 1.000          | 50.0               | 16.993              | 85                 | 122     | 60.9                                | 73.7              |
| 355.0         | 1.000          | 50.0               | 16.993              | 72                 | 135     | 62.9                                | 75.8              |

Notes:

1. KKHI-FM's licensed RC of 450 m AMSL and 393 m HAAT were used to determine the contour calculation RC of 207 m AMSL = 57 m AMSL + 150 m HAAT. However, using NOAA 30 sec. terrain data, an 8-radial AE of 43 m AMSL results. For purposes of this study, the more conservative licensed AE was utilized.

2. Radial average elevations are based on NOAA 30 sec. terrain data.



May 30, 1992

**PROPOSED 240A  
Healdsburg**

**PROPOSED  
60 dBu F5050**

**PROPOSED  
48 dBu F5010**

**CH 239B  
54 dBu F5010**

**CH 239B  
54 dBu F5050**

**KKHI 239B  
San Francisco  
BLH-850128LM**

Healdsburg Broadcasting, Inc.  
Proposed Channel 240A, Healdsburg, CA  
FCC Form 301, question 13, Allocation Study

Map showing Protected and Interference Contours  
To and From KKHI, San Francisco

10 0 10 20 30 40 50 Kilometres

Healdsburg Broadcasting, Inc.  
Proposed Channel 240A, Healdsburg, CA  
FCC Form 301, question 16

Proposed Coverage Contours  
N 38-32-24, W 122-57-39

Exhibit-6, page 1  
May 30, 1992

Map: USGS Western United States 1:250,000 (reduced) Santa Rosa

Proposed  
60 dBu F5050

Proposed  
70 dBu F5050

Area Within Proposed 60 dBu Contour = 2000 Km<sup>2</sup>  
Enclosed Population = 90,301 persons

